

Abstract of the Disclosure

The present invention relates to an apparatus for generating a driving voltage for a sense amplifier, which has 5 an enhanced ability of generating a core voltage for the sense amplifier. The apparatus comprises: voltage output means for outputting a predetermined value of voltage for driving the sense amplifier to a node; a first core voltage step-up means connected between a power supply and the node; 10 and a second core voltage step-up means connected between the power supply and the node, wherein the first and second core voltage step-up means are turned on in sequence to elevate the voltage level of the node connected with the sense amplifier up to the level of the power supply. The apparatus 15 of the invention can enhance the performance of the sense amplifier as well as execute detection amplification in a short time period. Further, the first and second core voltage step-up means are turned on in sequence to elevate the core voltage functioning as the driving voltage, thereby 20 reducing power noise. Moreover, each of the core voltage step-up drivers may be installed in each of the banks to reduce power consumption.